APPENDIX C

Wild and Scenic River Eligibility, Suitability, Classification, and Review

APPENDIX C

TABLE 1. CLASS	SIFICATION CRITERIA FOR	WILD, SCENIC, AND RECRI	EATIONAL RIVER AREAS.*
Attribute	Wild	Scenic	Recreational
Water Resource Development	Free of impoundment.	Free of impoundment.	Some existing impoundment or diversion. The existence of low dams, diversions or other modifications of the waterway is acceptable, provided the waterway remains generally natural and riverine in appearance.
Shoreline Development	Essentially primitive. Little or no evidence of human activity. The presence of a few inconspicuous structures, particularly those of historic or cultural value, is acceptable. A limited amount of domestic livestock grazing or hay production is acceptable. Little or no evidence of past timber harvest. No ongoing timber harvest.	Largely primitive and undeveloped. No substantial evidence of human activity. The presence of small communities or dispersed dwellings or farm structures is acceptable. The presence of grazing, hay production or row crops is acceptable. Evidence of past or ongoing timber harvest is acceptable, provided the forest appears natural from the riverbank.	Some development. Substantial evidence of human activity The presence of extensive residential development and a few commercial structures is acceptable. Lands may have been developed for the full range of agricultural and forestry uses. May show evidence of past and ongoing timber harvest.
Accessibility	Generally inaccessible except by trail. No roads, railroads or other provision for vehicular travel within the river area. A few existing roads leading to the boundary of the river area is acceptable.	Accessible in places by road. Roads may occasionally reach or bridge the river. The existence of short stretches of conspicuous or longer stretches of inconspicuous roads or railroads is acceptable.	Readily accessible by road or railroad. The existence of parallel roads or railroads on one or both banks as well as bridge crossings and other river access points is acceptable.
Water Quality	Meets or exceeds Federal criteria or federally approved State standards for aesthetics, for propagation of fish and wildlife normally adapted to the habitat of the river, and for primary contact	The Federal Water Pollution 1972 have made it a nation United States be made fish Therefore, rivers will not be	precluded from scenic or ecause of poor water quality rovided a water quality is being developed in

TABLE 1. CLASSIFICATION CRITERIA FOR WILD, SCENIC, AND RECREATIONAL RIVER AREAS.*						
Attribute	Wild	Scenic	Recreational			
	recreation (swimming) except where exceeded by natural conditions.					
* Table to be used or	nly in conjunction with text.					

WILD AND SCENIC RIVERS REVIEW, VERNAL FIELD OFFICE

Resource Overview

The Wild and Scenic Rivers Act established legislation for a National Wild and Scenic Rivers System (NWSRS) to protect and preserve designated rivers throughout the nation in their free-flowing condition, as well as their immediate environments. It contains policy for managing designated rivers, and created processes for designating additional rivers into the National system. Section 5(d) of the Act directs federal agencies to consider the potential for national wild, scenic and recreational river areas in all planning, for the use and development of water and related land resources. A "Wild and Scenic River's" review is being conducted as part of the Vernal Resource Management Plan Revision.

The first phase of Wild and Scenic River's (WSR's) review is to inventory all potentially eligible rivers within the planning area, to determine which of those rivers are eligible for designation into the NWSRS. In order to be eligible, rivers' must be "free-flowing," and possess at least one "outstandingly remarkable value." The inventories process to determine eligibility is the main focus of this "analysis of the management situation."

Next, all eligible rivers are taken through the land use planning process to determine their suitability for designation into the national system. One planning alternative will consider all eligible rivers as suitable, another alternative will consider no eligible rivers as suitable, and other alternatives may consider some river's or river segments as suitable and other rivers or river segments not suitable. "Suitability" determinations will be made in the Record of Decision (ROD) for the land use plan.

In final, there is also a reporting phase where "suitability" determinations are reported to Congress. There is no specific time requirement for completion of this phase, however, it is assumed that reporting will be done some time following completion of the land use plan. Only the Congress or the Secretary of Interior, upon an official request by a state, can designate a river into the national system.

Current Management Guidelines

- Memorandums of Understanding (MOU)
 Governor (State of Utah), Regional Forester (Intermountain Region-U.S. Forest Service), State Director (BLM), Regional Director (Rocky Mountain Region-National Park Service), 1997
- Wild and Scenic Rivers-Policy and Program Direction Identification, Evaluation, and Management BLM Manual 8351

- Wild and Scenic Rivers Act of 1968
- Wild and Scenic River Reference Guide Interagency Wild and Scenic Rivers Coordination Council, 1982
- Wild and Scenic River Review in the State of Utah
 "Process and Criteria" for Interagency Use, July 1996

Identification of Eligible Rivers

To determine eligibility, the Vernal Field Office (VFO) conducted an inventory of "all potentially eligible rivers." This included all rivers nominated during the "scoping" process or that appeared on National River lists. These rivers' were automatically identified and considered as potentially eligible. In addition, all rivers within the planning area were mapped and reviewed by agency and non-agency subject matter specialists and members of the interested public to identify any additional rivers that could be potentially eligible. All rivers determined to be eligible will be considered further for suitability in the planning process.

To be eligible, a river must be free flowing. The WSR Act defines "free-flowing" as any river or section of river, existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other minor structures at the time any river is proposed for inclusion in the National wild and scenic river's system will not automatically bar its consideration from such inclusion, provided that it will not be construed to authorize, intend, or encourage future construction of such structures within components of the National wild and scenic river's system. The intent of the U.S. Congress and federal regulations is that rivers must be generally free flowing, but not completely without human modification.

Another screening criterion to determine if a river segment may be eligible for inclusion in the WSR System is that the river must possess one or more "outstandingly remarkable" scenic, recreational, geological, fish, wildlife, historical, cultural, or other similar values including ecological value(s).

The size of a river is NOT a criterion of eligibility. To be eligible, rivers do not have to be outstanding white-water or boatable. Flow must simply be sufficient to sustain the outstandingly remarkable value that makes a river or river segment eligible for consideration.

A "tentative classification" of wild, scenic or recreational is determined for any eligible river. Tentative classifications are based on the evidence of man's activities and the condition of the river and the adjacent lands at the time of the inventory. "Eligible" rivers are classified according to the evidence of man's activities.

A "wild" river is "free of impoundments," with shorelines or watersheds essentially primitive, and unpolluted waters. A "scenic" river may have some development, and may be accessible in places by roads or railroads. A "recreational" river is considered as a river or section of river accessible by road or railroad, may have more extensive development along its shoreline, and may have undergone some impoundment or diversion in the past.

Documentation Process

Data Sources

- Maps of Vernal Planning Area at 1:100,000 scale
- National Rivers Inventory (NPS 1995)
- American Rivers Listing (Huntington and Echevarria 1991)
- "A Citizen's Proposal to Protect the Wild Rivers of Utah"
- Rivers or river segments identified by Federal Agencies, State, Indian Tribes, other local governments
- Rivers or river segments identified in the public scoping process

WSR System ID Team

The Vernal Field Office used a team of interdisciplinary specialists to review all potentially eligible rivers. The VFO coordinated with the Price and Richfield Field Offices, as well as the Ashley National Forest and the BLM in Colorado regarding river segments that crossed boundaries. Opportunities to provide input on river eligibility was provided to State, tribal and local governments, and to interested members of the public. Considerations involved the following:

All rivers that were nominated during the RMP scoping process, on National Rivers lists, and by local, state, BLM resource specialists, that were considered to be potentially eligible were inventories. All rivers and associated reaches (tributaries) in the Vernal Planning area were mapped at a 1:100,000 scale.

The team identified the regions of comparison to be the following sub-units of the Colorado Region Plateau: Uintah Mountain Section, Uintah Basin Section, Tavaputs Plateau Section, and Northern Canyon lands Section.

All potentially eligible rivers were divided into segments of essentially similar character where changes in "tentative classification (wild, scenic, or recreational)" might occur. The team reviewed all river segments and noted any "free-flowing" and "outstandingly remarkable values."

In order to identify outstandingly remarkable values, rivers within the planning area were compared with other rivers in the regions of comparison. Tentative classifications of wild, recreational, or scenic were made for all rivers that were "free-flowing" with at least one "outstandingly remarkable value."

"Preliminary" findings were provided to State, tribal and local governments for additional input. They were asked to identify any differences of opinion regarding the findings and if there were any additional potentially eligible rivers that should be considered. Based on their input, revisions will be made.

"Preliminary" findings are also made available to the interested public through an RMP planning bulletin (#3). They are asked to identify any differences of opinion regarding the findings and any additional potentially eligible rivers that should be considered. Based on their input, revisions will be made.

<u>Note</u>: The VFO is currently in the process now of doing steps 6 and 7. And based on what county, state, and local government response including public input, steps 6 and 7 may be adjusted.

Summary of River Inventories

- #89 River segments identified as potentially eligible and inventoried
- # 9 River segments determined to be eligible (free-flowing with at least one outstandingly remarkable)

The following list identifies all rivers potentially eligible and considered through the wild and scenic rivers review. It includes all rivers listed, nominated, or identified by VFO specialists (WSR System ID Team) or identified by others including state, tribal or local governments, or interested members of the public.

1.	Allen Draw	33.	Garden Creek	66.	Sage Creek
2.	Anderson Hollow	34.	Gorge Creek	67.	Sand Wash Creek
3.	Argyle Creek	35.	Goslin Creek	68.	Sears Creek
4.	Ashley Creek	36.	Green River	69.	Sheep Wash Creek
5.	Beaver Creek	37.	Grindstone Wash	70.	Simons Creek
6.	Bender Draw	38.	Halfway Hollow Creek	71.	Smelter Creek
7.	Big Draw	39.	Jack Canyon	72.	South Branch Diamond
8.	Big Springs	40.	Jackson Creek		Gulch
9.	Big Brush Creek	41.	Jesse Ewing Canyon	73.	Spring Creek
10.	Birch Creek	42.	Jones Hole Creek	74.	Steinaker Creek
11.	Bitter Creek	43.	Jones Hollow	75.	Sweet Water Creek
12.	Blair Draw	44.	Kettle Creek	76.	Ten Mile Creek
13.	Bowery Draw	45.	Lake Creek	77.	Tolivers Creek
14.	Castle Peak Creek	46.	Lambson Draw	78.	Twelve Mile Wash
15.	Clay Basin Creek	47.	Little Davenport Creek		Creek
16.	Collier Hole Creek	48.	Little Brush Creek	79.	Uintah
17.	Cow Creek	49.	Logge Canyon	80.	Upper Water Hollow
18.	Crouse Creek	50.	Lower Water Hollow	81.	Water Canyon
19.	Crow Creek	51.	Marshall Draw	82.	Wells Draw Creek
20.	Crumb Canyon	52.	Martin Draw	83.	West Fork Willow
21.	Cub Creek	53.	Milk Creek		Creek
22.	Deep Creek	54.	Mill Canyon	84.	White River
23.	Diamond Gulch	55.	Minnie Maud Creek	85.	White Rocks
24.	Dry Fork Creek	56.	Mosby Creek	86.	Willow Spring Draw
25.	Duchesne	57.	Mine Mile Creek	87.	Willow Creek
26.	Dutch John Canyon	58.	O-WI-Yu-Kuts Creek		(Brown's Park)
27.	East Cottonwood	59.	Pariette Draw	88.	Willow Creek (Indian
	Canyon	60.	Pigeon Creek		Canyon)
28.	Eight Mile Flat Creek	61.	Pinnacle Canyon	89.	Yellowstone
29.	Evacuation Creek	62.	Pot Creek		
30.	Ford Creek	63.	Eat Hole		
31.	Four Mile Creek	64.	Red Creek		
32.	Galloway Creek	65.	Rock Creek		

References

A Citizen's Proposal to Protect the Wild River of Utah, Utah River Conservation Council, 1997.

American Rivers Listing (Huntington and Echevarria, 1991).

A memorandum of Understanding (MOU), between the Governor (State of Utah), Regional Forester (Intermountain Region-U.S. Forest Service), State Director (BLM), Regional Director (Rocky Mountain Region-National Park Service), and Counties of Utah. 1997.

Nationwide Rivers Inventory, USDI, National Park Service, 1995.

Wild and Scenic Rivers-Policy and Program Direction, for Identification, Evaluation, and Management BLM Manual 8351.

Wild and Scenic Rivers Act of 1968.

Wild and Scenic River Reference Guide, Interagency Wild and Scenic Rivers Coordination Council, 1982.

Wild and Scenic Rivers Review in the State of Utah – Process and Criteria for Interagency Use, July 1996.

TABLE 2. DOCUMENTATION OF ELIGIBILITY: POTENTIALLY ELIGIBLE RIVERS CONSIDERED AND FREE-FLOWING DETERMINATION, VERNAL FIELD OFFICE.

River Name	Reason for Consideration	Segment Description	Free- flowing Yes/No	Reason for Free-flowing Determination
Argyle Creek	E, F	Head waters to Carbon County line	Yes	Natural flow
Bitter Creek	F	From the Utah State line to where Bitter Creek enters private property	Yes	Natural flow
Evacuation Creek	F	From the Utah State line to its confluence with the White River	Yes	Natural flow
Upper Green River	A, B, E	Between Little Hole and the Utah State line	Yes	Natural flow
Middle Green River	A, B, E	Between Dinosaur National Monument and the public land boundary north of Ouray	Yes	Natural flow
Lower Green River	A, B, E	Between the public land boundary south of Ouray and the Carbon County line	Yes	Natural flow
Nine Mile Creek	E, F	The Segment within Duchesne County between	Yes	Natural flow

TABLE 2. DOCUMENTATION OF ELIGIBILITY: POTENTIALLY ELIGIBLE RIVERS CONSIDERED AND FREE-FLOWING DETERMINATION, VERNAL FIELD OFFICE.

River Name	Reason for Consideration	Segment Description	Free- flowing Yes/No	Reason for Free-flowing Determination
		the Carbon County line and the confluence with Gate Canyon		
Nine Mile Creek	E, F	The segment that lies within Duchesne County between the Green River and the Carbon County line	Yes	Natural flow
White River	A, B, E, F	Colorado State Line to the Boundary of the Uintah and Ouray Indian Reservation.	Yes	Natural flow

- A Nationwide Rivers Inventory List
- B American Rivers Outstanding Rivers List
- C 1970 USDA/USDI List
- D Published Guidebooks (i.e. American Whitewater Affiliation List)
- E Statewide Comprehensive Outdoor Recreation Plans
- F Officially identified by Federal Agencies, State, Indian tribes, other local governments
- G Identified in public scoping during the RMP Process

TABLE 3.			
Eligible River Segment	Tentative Classification	Description of Classified Section	Reason for Classification
Argyle Creek	Recreational	All BLM-managed portions of Argyle Creek from the Head waters to Carbon County line	The entire segment is paralleled by a county road. The high percentage of private land adjacent to the stream has resulted in the construction of numerous ranch houses and summer homes in the corridor. A power line parallels the stream for approximately 7 miles.
Bitter Creek	Scenic	All BLM-managed portions of Bitter Creek between the Utah State Line and where it enters private property.	A two track road parallels the creek for much of its length, however, it is hidden from view much of the way and does not attract attention. Other than the road there are few other improvements within the corridor.
Evacuation Creek	Recreational	All BLM-managed portions of Evacuation Creek between the Utah State line and its confluence with the White River.	An improved dirt road parallels the Creek much of its length. Two bridges and a suspended pipeline cross the Creek An old railroad grade follows the corridor through

TABLE 3.			
Eligible River Segment	Tentative Classification	Description of Classified Section	Reason for Classification
			the southern part of the segment. However, there are sections along the northern part of the segment that appear wild with no man made intrusions evident.
Upper Green River	Scenic	All BLM-managed portions of the Green River between Little Hole and the Utah State line.	An improved dirt road parallels the river for a short distance near the John Jarvie Historic Site and BLM's Bridge Hollow and Indian Crossing Campgrounds. A bridge crosses the river at this point. All four of these improvements can readily be seen from the river. There are other improvements within the corridor such as the Allan Ranch and improvements associated with the Utah Division of Wildlife Resources Browns Park Waterfowl Refuge. However, much of the corridor is free from intrusions and is wild in appearance.
Middle Green River	Recreational	All BLM managed portions of the Green River between the boundary of Dinosaur National Monument and the public land boundary north of Ouray.	There are many intrusions along the river corridor. Irrigated fields, homes, corrals, fences, roads, a gravel pit and numerous oil and gas wells.
Lower Green River	Scenic	All BLM managed portions of the Green River between the public land boundary south of Ouray and the Carbon County line.	Very few intrusions are visible from the river. Oil and gas wells can be seen near Parget Draw. Roads access the river corridor at Parget Draw, near Willow Creek, Moon Bottom, Four Mile Draw, Nine Mile Creek, and both sides of the river at Sand Wash. BLM has a Ranger Station, Campground and Boat Ramp at Sand Wash. A buried pipeline crosses the river near Four Mile Draw.
Nine Mile Creek	Recreational	The Segment within Duchesne County between the Carbon County line and the confluence with Gate Canyon	Intrusions exist along the river corridor; irrigated fields, homes, corrals, fences, roads, and a buried natural gas pipeline parallels the corridor
Nine Mile Creek	Scenic	The segment that lies within Duchesne County between the Green River and Gate Canyon	Irrigated fields and a road parallel the stream for three miles on the western end of the corridor. A

TABLE 3.			
Eligible River Segment	Tentative Classification	Description of Classified Section	Reason for Classification
			road crosses the stream near the Green River.
White River	Scenic, Wild	All BLM managed portions of the White River between the Colorado State line and the boundary of the Uintah and Ouray Indian Reservation.	Access and roads exists in places along this segment. A bridge crosses private land and there is a buried pipeline.

TABLE 4. DOCUMENTATION OF ELIGIBILITY: OUTSTANDINGLY REMARKABLE VALUES POTENTIALLY ELIGIBLE RIVERS CONSIDERED, VERNAL FIELD OFFICE.					
River Name	Description of Values Present				
Argyle Creek Head waters to Carbon County line.	Scenic values were identified as an outstandingly remarkable river- related value for Argyle Creek. Scenic; Much of the corridor is Visual Resource Management (VRM) Class II. The area is characterized by steep wooded side canyons, high canyon walls, and vertical cliff faces.				
Bitter Creek From the Utah State line to where Bitter Creek enters private property.	Fish, Wildlife/Habitat, Cultural, Historic and Recreation were identified as outstanding remarkable river related values for Bitter Creek. Fish: This stream segment supports a population of brook trout. Wildlife/Habitat: The corridor along this segment of Bitter Creek supports a large population of deer and elk. It is also an important area for black bear, cougar coyote, beaver, muskrat, porcupine, bobcat, gray fox and red fox. Cultural: This area was known formerly and presently to Tribal people as highly significant culturally and spiritually. Historic: The Book Cliff area has a colorful past of Indians, mountain men, traders, cattlemen, cowboys, and outlaws. A number of historic sites still exist along Bitter Creek and add interest to a visit: These include ranch buildings and homesteads. Recreational: the presence of numerous waterfowl and wildlife species provide good opportunities for fishing, hunting, waterfowl viewing, and camping.				
Evacuation Creek From the Utah State line to its confluence with the White River.	Historic values was identified as an outstanding remarkable river related value for Evacuation Creek. Historic: The southern one half of the segment parallels the abandoned narrow gauge railroad grade that ran between Mack Colorado and Watson, Utah. The town site of Watson is on Evacuation Creek. Around the turn of the century Watson was a busy railroad town. Trains stopped here before going on to the Gilsonite mining camp of Rainbow. In the spring each year wool and lambs from several thousand head of sheep were shipped to market along this route.				
Upper Green River Between Little Hole and the	Scenic, Recreational, Fish, Wildlife/Habitat and Cultural values were identified as outstanding remarkable river values for the Green River.				

TABLE	4.	DOCUMENTATION	OF	ELIGIBILITY:	OUTSTANDINGLY	REMARKABLE	VALUES
POTENT	TAL	LY ELIGIBLE RIVERS	CO	NSIDERED, VERN	NAL FIELD OFFICE.		

River Name	Description of Values Present
Utah State line.	Scenic: The upper portion of the segment presents striking, abrupt contrasts, sometimes flowing through a deep, narrow gorge, sometimes between low, rolling hills, and sometimes across an almost flat-bottomed valley. Most of the segment winds placidly through pine and shrub covered canyons. In places reddish rock walls rise or stair step away from the river. The river is an appealing clear green color with deep holes and small rapids or riffles.
	Recreational: The slow moving river and the presence of numerous waterfowl and wildlife species provide good opportunities for fishing, hunting, waterfowl viewing, floating and camping.
	Fish: The upper half of the segment contains prime trout habitat and is a continuation of the blue ribbon trout fishery that begins directly below Flaming Gorge Dam.
	Wildlife/Habitat: A large portion of the segment is managed to provide high quality nesting and migration habitat for Canada geese, ducks and other migratory birds. A variety of shore and songbirds is also seen. The area also provides crucial winter habit for both deer and elk. Cultural: Browns Park has a colorful past of Indians, mountain men, traders, cattlemen, cowboys, and outlaws. A number of historic sites still exist in Browns Park, and add interest to a visit: these include ranch buildings, homesteads, and the remains of several outlaw cabins. Several sites have been nominated for inclusion on the National Register of Historic Places.
Middle Green River Between Dinosaur National Monument and the public land boundary north of Ouray.	Fish values was identified as an outstanding remarkable river value for the Green River. Fish: Two endangered fish are found in this segment of the Green River. They are the humpback chub and the Colorado squaw fish
Lower Green River Between the public land boundary south of Ouray and the Carbon County line.	Recreational and Fish values were identified as outstanding remarkable river values for the Green River. Recreational: The slow moving river and the presence of numerous waterfowl and wildlife species provide good opportunities for fishing, hunting, waterfowl viewing, floating and camping. This segment also provides fine canoeing in an attractive pastoral setting. Fish: Two endangered fish are found in this segment of the Green River. They are the humpback chub and the Colorado squawfish.
Nine Mile Creek The segment that lies within Duchesne County between the Green River and Gate Canyon.	Scenic and Cultural values were identified as outstanding remarkable river values for Nine Mile Creek. Scenic: Nine Mile Canyon consists of steep walls combined with alluvial bottomlands, farmed with irrigation from the creek. Scenery varies from the aspen groves to the desert environment and vertical brown, tan and gray cliffs. A perennial stream, balanced rocks and small window arches can be seen from the canyons' road. Cultural: Archaeologically the area of Nine Mile Canyon is significant internationally, nationally and locally. Its prehistoric rock art is world renowned. The remains of the Fremont culture are probably more visible in Nine Mile Canyon than anywhere else. Over 1000 sites have been recorded in the canyon over the last 100 years. Nine Mile Canyon

TABLE 4. DOCUMENTATION OF ELIGIBILITY: OUTSTANDINGLY REMARKABLE VALUES POTENTIALLY ELIGIBLE RIVERS CONSIDERED, VERNAL FIELD OFFICE.						
River Name	Description of Values Present					
	has been proposed for an archeological district on the National Register of Historic Places.					
White River Colorado State Line to the Boundary of the Uintah and	Recreational, Scenic (Geologic), Fish, Wildlife/Habitat and Historic values were identified as outstanding remarkable river values for the White River.					
Ouray Indian Reservation.	Recreational: The White River is a favorite canoeing destination for people from all over the state and beyond. The rivers Class II rapids are exciting enough to attract advanced kayakers, yet gentle enough to bring novice canoers and families to float through remarkable solitude.					
	Scenic (Geologic): Towering 800 foot sandstone cliffs line the White River. Broad sloping terraces, sandstone walls, butte's, pinnacles and eroded towers create fascinating shapes and textures. The rivers fossil beds display a unique variety of ancient life forms.					
	Fish: The White River provides critical habitat for the endangered Colorado River Squaw Fish. Other threatened, endangered, or sensitive fish species in the river include Razorback Sucker, Flannel Mouth Sucker and the Bony Tail Chub.					
	Wildlife/Habitat: Threatened, endangered, or sensitive animal species in the river corridor include the Yellow-Billed Cuckoo, Peregrine Falcon and the Bald Eagle. Other wildlife that can be found in the corridor include mule deer, pronghorn antelope, cougar, beaver, muskrat, porcupine, bobcat, coyote, gray fox, red fox, and resident and migratory birds such as golden eagle, Canadian goose, mallard duck and flycatchers.					
	Historic: Many pivotal historic events occurred in the White River. Canyon. Chronicles of early explorers such as Friar Velez de Escalante, John Wesley Powell, Frederick Dellenbaugh, and Kit Carson described the unique topography of the White River.					

WILD AND SCENIC RIVER SUITABILITY

Determination of Suitability

Rivers determined to be eligible for inclusion into the National Wild and Scenic Rivers System (NWSRS) are further evaluated to determine their suitability for inclusion into the national system.

The purpose of the suitability step of the study process is to determine whether eligible rivers would be appropriate additions to the NWSRS. By considering tradeoffs between corridor development and river protection, it is designed to help the manager determine the best approach for managing the river corridor.

This resource management plan evaluates impacts that would result if the eligible rivers were determined suitable and managed to protect their free-flowing nature, tentative classification, outstandingly remarkable values, and water quality. It also addresses impacts that would result if the eligible rivers are not determined suitable, and those values are not managed for. Alternatives considered include no action, which does not address suitability and leaves rivers eligible; an alternative where all eligible rivers would be determined suitable; an alternative where no

eligible rivers would be determined suitable; and an alternative where portions of eligible rivers would be determined suitable

In addition to the impact analysis addressed by alternative, the following suitability considerations are applied to each eligible river in Table 5:

- Characteristics which do or do not make the area a worthy addition to the NWSRS
- Status of land ownership and use in the area
- The reasonably foreseeable potential uses of the land and waters that would be enhanced, foreclosed, or curtailed if the area were included in the NWSRS; and the values which could be foreclosed or diminished if the area is not protected as part of the NWSRS
- Interest by federal, tribal, state, local, and other public entities in designation or nondesignation of a river, including the extent to which the administration of the river, including the costs thereof, can be shared by the above mentioned entities
- Ability of the agency to manage and protect the values of a river area if it were designated, and other mechanisms to protect identified values other than designation into the NWSRS
- The estimated cost, if necessary, of acquiring lands, interests in lands, and administering the area if it were included in the NWSRS
- The extent to which administration costs would be shared by local and state governments

Public comment received on the Draft EIS/RMP would be used to improve the documentation of impacts that would result from the various alternatives, as well as the documentation of the suitability considerations presented in this appendix. The actual determination of whether or not each eligible segment is suitable is a decision to be made in the record of decision for the Vernal RMP.

Suitability Considerations by Eligible River Segment

Suitability Considerations	Consideration Applied to Eligible River
Argyle Creek	
Characteristics which do or do not make it a worthy addition to the NWSRS	Scenic values were identified as an outstandingly remarkable river-related value for Argyle Creek. This scenic area is characterized by steep wooded side canyons, high canyon walls, and vertical cliff faces.
Land ownership and current use	Of the 22 miles of shoreline in this segment, 4 miles are BLM, 1.7 are state and 16.7 are private. Livestock grazing occurs along its banks.
Uses, including reasonably foreseeable uses, that would be enhanced or curtailed if designated; and values that would be diminished if not designated	Uses and values affected would be addressed in the impact analysis for the draft Vernal RMP.
Interest of federal, public, state, tribal, local, or other public entity in	There is no county support for designation. Whether or not the State supports designation is not known. There is likely support

Suitability Considerations	Consideration Applied to Eligible River
designation or non-designation, including administration sharing	from the environmental community for designation.
Manageability of the river if designated, and other means of protecting values	Manageability if designated and other means of protecting values would be extrapolated from the impact analysis for the Vernal RMP/EIS.
The estimated costs of administering the river, including costs for acquiring lands	Estimated costs would be identified in the final Vernal RMP/EIS. No acquisition needs have been identified at this time.
The extent to which administration costs would be shared by local and state governments	State and local governments would not share costs of managing the river.
Bitter Creek	
Characteristics which do or do not make it a worthy addition to the NWSRS	The fish and wildlife habitat, cultural, historic and recreational values are outstandingly remarkable and make this a worthy addition to the NWSRS. This stream segment supports brook trout, and the river corridor supports a large population of deer and elk, and is also an important area for black bear, cougar coyote, beaver, muskrat, porcupine, bobcat, gray fox and red fox. This area was known formerly and presently to Tribal people as highly significant culturally and spiritually due to the river. The Book Cliff area has a colorful past of Indians, mountain men, traders, cattlemen, cowboys, and outlaws. A number of historic sites still exist along Bitter Creek and add interest to a visit: These include ranch buildings and homesteads. In addition to the recreation opportunities related to the historical sites, the presence of numerous waterfowl and wildlife species supported by the creek provide good opportunities for fishing, hunting, and waterfowl viewing.
Land ownership and current use	Of the 20.4 miles of shoreline in this segment, 7.3 miles are BLM, 0.3 are state, 7.0 are Tribal, 4.6 are UDWR, and 0.3 are private. This river is used extensively for recreation, including, floating, fishing, hunting, wildlife and waterfowl viewing, and for exploring historical sties. Livestock grazing occurs along its banks.
Uses, including reasonably foreseeable uses, that would be enhanced or curtailed if designated; and values that would be diminished if not designated	Uses and values affected would be addressed in the impact analysis for the Vernal RMP/EIS.
Interest of federal, public, state, tribal, local, or other public entity in designation or non-designation, including sharing of administration of the river	There is no county support for designation. Whether or not the State supports designation is not known. There is likely support from the environmental community for designation.
Manageability of the river if designated, and other means of protecting values	Manageability if designated and other means of protecting values would be extrapolated from the impact analysis for the Vernal RMP/EIS.

TABLE 5. SUITABILITY CONSIDERATIONS BY ELIGIBLE RIVER SEGMENT.	
Suitability Considerations	Consideration Applied to Eligible River
The estimated costs of administering the river, including costs for acquiring lands and interests	Estimated costs would be identified in the final Vernal RMP/EIS. No acquisition needs have been identified at this time.
The extent to which administration costs would be shared by local and state governments	State and local governments would not share costs of managing the river.
Evacuation Creek	
Characteristics which do or do not make it a worthy addition to the NWSRS	The creek's outstandingly remarkable historic values make it a worthy addition to the NWSRS. The southern one half of the segment parallels the abandoned narrow gauge railroad grade that ran between Mack Colorado and Watson, Utah. The town site of Watson is on Evacuation Creek. Around the turn of the century Watson was a busy railroad town. Trains stopped here before going on to the Gilsonite mining camp of Rainbow. In the spring each year wool and lambs from several thousand head of sheep were shipped to market along this route.
Land ownership and current use	Of the 25.4 miles of river in this segment, 7.1 miles are BLM, 1.3 are state and 17.0 are private. This river is used by recreationists for exploring historical sties. Livestock grazing occurs along its banks.
Uses, including reasonably foreseeable uses, that would be enhanced or curtailed if designated; and values that would be diminished if not designated	Uses and values affected would be addressed in the impact analysis for the Vernal RMP/EIS.
Interest of federal, public, state, tribal, local, or other public entity in designation or non-designation, including sharing of administration of the river	There is no county support for designation. Whether or not the State supports designation is not known. There is likely support from the environmental community for designation.
Manageability of the river if designated, and other means of protecting values	Manageability if designated and other means of protecting values would be extrapolated from the impact analysis for the Vernal RMP/EIS.
The estimated costs of administering the river, including costs for acquiring lands and interests	Estimated costs would be identified in the final Vernal RMP/EIS. No acquisition needs have been identified at this time.
The extent to which administration costs would be shared by local and state governments	State and local governments would not share costs of managing the river.
Upper Green River	
Characteristics which do or do not make it a worthy addition to the NWSRS	The river's scenic, recreational, fish wildlife/habitat and cultural values are outstanding remarkable and make it a worthy addition to the NWSRS. The upper portion of the segment presents striking, abrupt contrasts, sometimes flowing through a deep, narrow gorge, sometimes between low, rolling hills, and sometimes across an almost flat-bottomed valley. In places red rock walls rise or stair step away from the river. The river is an appealing clear green color with deep holes and

Suitability Considerations	Consideration Applied to Eligible River
	small rapids or riffles. The presence of numerous waterfowl and wildlife species provide good opportunities for fishing, hunting, waterfowl viewing, and floating. The segment contains prime trout habitat and is a continuation of the blue ribbon trout fishery that begins directly below Flaming Gorge Dam. The segment provides high quality nesting and migration habitat for Canada geese, ducks and other migratory birds, and helps to provide crucial winter habit for both deer and elk. This segment has supported a colorful past of Indians, mountain men, traders, cattlemen, cowboys, and outlaws. A number of historic sites still exist in along the river within Browns Park, and are an attraction to recreation users. These include ranch buildings, homesteads, and the remains of several outlaw cabins. Several sites have been nominated for inclusion on the National Register of Historic Places.
Land ownership and current use	Of the 22.0 miles of shoreline in this segment, 12.0 miles are BLM, 3.7 are UDWR, 5.2 are USFS, 0.8 are state and 0.3 are private. This river is used extensively for recreation, including, floating, fishing, hunting, wildlife and waterfowl viewing, and for exploring historical sties. Livestock grazing occurs along its banks.
Uses, including reasonably foreseeable uses, that would be enhanced or curtailed if designated; and values that would be diminished if not designated.	Uses and values affected would be addressed in the impact analysis for the Vernal RMP/EIS.
Interest of federal, public, state, tribal, local, or other public entity in designation or non-designation, including sharing of administration of the river	There has been some State and local government support for designation of this segment in the past, and bills have been introduced into Congress for the purpose of such designation. However, there is currently no county support for designation. Whether or not the State currently supports designation is not known. There is strong support from the environmental community for designation. The Forest Service would share the costs of managing this section of the Green River.
Manageability of the river if designated, and other means of protecting values	Manageability if designated and other means of protecting values would be extrapolated from the impact analysis for the Vernal RMP/EIS.
The estimated costs of administering the river, including costs for acquiring lands and interests	Estimated costs would be identified in the final Vernal RMP/EIS. No acquisition needs have been identified at this time.
The extent to which administration costs would be shared by local and state governments	State and local governments would not share costs of managing the river.
Middle Green River	
Characteristics which do or do not make it a worthy addition to the NWSRS	The existence of two endangered fish within this segment of the Green River make it a worthy addition to the NWSRS. They are the humpback chub and the Colorado squaw fish
Land ownership and current use	Of the 47.5 miles of shoreline in this segment, 20.3 is BLM, 1.6 is state and 25.6 is private. This river is used extensively for

Suitability Considerations	Consideration Applied to Eligible River
	recreation, including, floating, fishing, hunting, wildlife and waterfowl viewing. Livestock grazing occurs along its banks.
Uses, including reasonably foreseeable uses, that would be enhanced or curtailed if designated; and values that would be diminished if not designated	Uses and values affected would be addressed in the impact analysis for the Vernal RMP/EIS.
Interest of federal, public, state, tribal, local, or other public entity in designation or non-designation, including sharing of administration of the river	There has been some State and local government support for designation of this segment in the past, and bills have been introduced into Congress for the purpose of such designation. However, there is currently no county support for designation. Whether or not the State currently supports designation is not known. There is strong support from the environmental community for designation. The Forest Service would share the costs of managing this section of the Green River.
Manageability of the river if designated, and other means of protecting values	Manageability if designated and other means of protecting values would be extrapolated from the impact analysis for the Vernal RMP/EIS.
The estimated costs of administering the river, including costs for acquiring lands and interests	Estimated costs would be identified in the final Vernal RMP/EIS. No acquisition needs have been identified at this time.
The extent to which administration costs would be shared by local and state governments	State and local governments would not share costs of managing the river.
Lower Green River	
Characteristics which do or do not make it a worthy addition to the NWSRS	Recreational and fish values were identified as outstandingly remarkable on this segment of the Green River, and make it a worthy addition to the NWSRS. The river and the presence of numerous waterfowl and wildlife species provide good opportunities for fishing, hunting, waterfowl viewing, camping, rafting and canoeing in an attractive pastoral setting. The two endangered fish species found in this segment of the Green River are the humpback chub and the Colorado squawfish.
Land ownership and current use	Of the 29.6 miles of shoreline in this segment, 26.8 is BLM, 0 is state and 2.8 is private. This river is used extensively for recreation, including canoeing, floating, fishing, hunting, wildlife and waterfowl viewing, and for exploring historical sties. Livestock grazing occurs along its banks.
Uses, including reasonably foreseeable uses, that would be enhanced or curtailed if designated; and values that would be diminished if not designated.	Uses and values affected would be addressed in the impact analysis for the Vernal RMP/EIS.
Interest of federal, public, state, tribal, local, or other public entity in designation or non-designation, including sharing of administration of the river	There has been some State and local government support for designation of this segment in the past, and bills have been introduced into Congress for the purpose of such designation. However, there is currently no county support for designation. Whether or not the State currently supports designation is not

TABLE 5. SUITABILITY CONSIDERATIONS BY ELIGIBLE RIVER SEGMENT.	
Suitability Considerations	Consideration Applied to Eligible River
	known. There is strong support from the environmental community for designation. The Forest Service would share the costs of managing this section of the Green River.
Manageability of the river if designated, and other means of protecting values	Manageability if designated and other means of protecting values would be extrapolated from the impact analysis for the Vernal RMP/EIS.
The estimated costs of administering the river, including costs for acquiring lands and interests	Estimated costs would be identified in the final Vernal RMP/EIS. No acquisition needs have been identified at this time.
The extent to which administration costs would be shared by local and state governments	State and local governments would not share costs of managing the river.
Nine Mile Creek, Segment A	
Characteristics which do or do not make it a worthy addition to the NWSRS	Scenic and cultural values were identified as outstandingly remarkable, and make this segment a worthy addition to the NWSRS. The steep, brown, tan and gray walls of Nine Creek Canyon were created over time by the perennial creek, and frame the excellent, varied scenery from aspen groves to desert flora. Balanced rocks and small window arches can be seen. The alluvial bottomlands were historically farmed with irrigation from the creek. Nine Mile Canyon is significant internationally, nationally, and locally. It's prehistoric rock art is world renowned. The remains of the Fremont culture are properly more visible in Nine Mile canyon than anywhere else. Over 1000 sites have been recorded in the canyon over the last 100 years. Nine Mile Canyon has been proposed for an archeological district on the National register of Historic Places.
Land ownership and current use	Of the 16.4 miles of shoreline in this segment, 11.3 is BLM, 2.3 is state and 2.8 is private. This creek is integral to this world-class cultural area, which is a destination area for visitors exploring cultural sites. Livestock grazing occurs along its banks, and there is some oil and gas exploration activity in the area.
Uses, including reasonably foreseeable uses, that would be enhanced or curtailed if designated; and values that would be diminished if not designated	Uses and values affected would be addressed in the impact analysis for the Vernal RMP/EIS.
Interest of federal, public, state, tribal, local, or other public entity in designation or non-designation, including sharing of administration of the river	There is no county support for designation. Whether or not the State supports designation is not known. There is likely support from the environmental community for designation.
Manageability of the river if designated, and other means of protecting values	Manageability if designated and other means of protecting values would be extrapolated from the impact analysis for the Vernal RMP/EIS.

Suitability Considerations	Consideration Applied to Eligible River
The estimated costs of administering the river, including costs for acquiring lands and interests	Estimated costs would be identified in the final Vernal RMP/EIS. No acquisition needs have been identified at this time.
The extent to which administration costs would be shared by local and state governments	State and local governments would not share costs of managing the river.
Nine Mile Creek, Segment B	
Characteristics which do or do not make it a worthy addition to the NWSRS	Scenic and cultural values were identified as outstandingly remarkable, and make this segment a worthy addition to the NWSRS. The steep, brown, tan and gray walls of Nine Creek Canyon were created over time by the perennial creek, and frame the excellent, varied scenery from aspen groves to desert flora. Balanced rocks and small window arches can be seen. The alluvial bottomlands were historically farmed with irrigation from the creek. Nine Mile Canyon is significant internationally, nationally, and locally. It's prehistoric rock art is world renowned. The remains of the Fremont culture are properly more visible in Nine Mile canyon than anywhere else. Over 1000 sites have been recorded in the canyon over the last 100 years. Nine Mile Canyon has been proposed for an archeological district on the National register of Historic Places.
Land ownership and current use	Of the 6.5 miles of shoreline in this segment, 0 is BLM, .5 is state and 6.0 is private. This creek is integral to this world-class cultural area, which is a destination area for visitors exploring cultural sites. Livestock grazing occurs along its banks, and there is some oil and gas exploration activity in the area.
Uses, including reasonably foreseeable uses, that would be enhanced or curtailed if designated; and values that would be diminished if not designated	Uses and values affected would be addressed in the impact analysis for the Vernal RMP/EIS.
Interest of federal, public, state, tribal, local, or other public entity in designation or non-designation, including sharing of administration of the river	There is no county support for designation. Whether or not the State supports designation is not known. There is likely support from the environmental community for designation.
Manageability of the river if designated, and other means of protecting values	Manageability if designated and other means of protecting values would be extrapolated from the impact analysis for the Vernal RMP/EIS.
The estimated costs of administering the river, including costs for acquiring lands and interests	Estimated costs would be identified in the final Vernal RMP/EIS. No acquisition needs have been identified at this time.
The extent to which administration costs would be shared by local and state governments	State and local governments would not share costs of managing the river.

Suitability Considerations	Consideration Applied to Eligible River
White River	
Characteristics which do or do not make it a worthy addition to the NWSRS	Recreational, scenic/geologic, fish and wildlife/habitat and historic values were identified as outstandingly remarkable, and make the White River a worthy addition to the NWSRS. The White River is a favorite canoeing destination for people from all over the state and beyond. The rivers Class II rapids are exciting enough to attract advanced kayakers, yet gentle enough to bring novice canoers and families to float through remarkable solitude. Towering 800-foot sandstone cliffs were cut by the White River. Broad sloping terraces, sandstone walls, butte's, pinnacles and eroded towers create fascinating shapes and textures. Fossil beds exposed by the river display a unique variety of ancient life forms. The White River provides critical habitat for the endangered Colorado River Squaw Fish. Other threatened, endangered, or sensitive fish species in the river include Razorback Sucker, Flannel Mouth Sucker and the Bony Tail Chub. Threatened, endangered, or sensitive animal species in the river corridor include the Yellow-Billed Cuckoo, Peregrine Falcon and the Bald Eagle. Other wildlife that can be found in the corridor and utilize the river include mule deer, pronghorn antelope, cougar, beaver, muskrat, porcupine, bobcat, coyote, gray fox, red fox, and resident and migratory birds such as golden eagle, Canadian goose, mallard duck and flycatchers. Many pivotal historic events occurred in the White River. Canyon. Chronicles of early explorers such as Friar Velez de Escalante, John Wesley Powell, Frederick Dellenbaugh, and Kit Carson described the unique topography of the White River.
Land ownership and current use	Of the 45.7 miles of shoreline in this segment, 23.7 is BLM, 5.9 is state, 5.0 is Tribal, and 11.1 is private. This river is used extensively for recreation, including canoeing, floating, fishing, hunting, wildlife and waterfowl viewing, and for exploring historical sties. Livestock grazing occurs along its banks, and there is some oil and gas exploration activity in the area.
Uses, including reasonably foreseeable uses, that would be enhanced or curtailed if designated; and values that would be diminished if not designated	Uses and values affected would be addressed in the impact analysis for the Vernal RMP/EIS.
Interest of federal, public, state, tribal, local, or other public entity in designation or non-designation, including sharing of administration of the river	There is no county support for designation. Whether or not the State supports designation is not known. There is strong support from the environmental community for designation.
Manageability of the river if designated, and other means of protecting values	Manageability if designated and other means of protecting values would be extrapolated from the impact analysis for the Vernal RMP/EIS.

TABLE 5. SUITABILITY CONSIDERATIONS BY ELIGIBLE RIVER SEGMENT.	
Suitability Considerations	Consideration Applied to Eligible River
The estimated costs of administering the river, including costs for acquiring lands and interests	Estimated costs would be identified in the final Vernal RMP/EIS. No acquisition needs have been identified at this time.
The extent to which administration costs would be shared by local and state governments	State and local governments would not share costs of managing the river.